

REMARKS

The rejection of Claims 1, 3 and 12 under 35 U.S.C. § 102(b) as anticipated by U.S. 4,677,154 (Narayan et al) or U.S. 6,242,097 (Nishiguchi et al), is respectfully traversed. All the claims have the limitations of Claim 2, not subject to this rejection. Accordingly, it is respectfully requested that it be withdrawn.

The rejection of Claims 1-4 and 12 under 35 U.S.C. § 103(a) as unpatentable over Narayan et al or Nishiguchi et al, in view of U.S. 6,411,248 (Barbour et al), is respectfully traversed. The rejected claims are now drawn to a stabilized thermoplastic polyurethane (TPU) comprising 0.1 to 5% by weight of at least one phenolic antioxidant and 0.1 to 2.5% by weight of at least one of a triazole derivative and hydrazine derivative of salicylaldehyde, based on the total weight of the TPU. Applicants describe in the specification at page 6, last paragraph that surprisingly good results are obtained when such metal activators are used. Such surprising results are borne out by the comparative data in the specification, as now discussed.

Example 1 describes eight compositions, labeled as Experiment numbers 1.1 through 1.8, that were each used to make a stabilized TPU, as described at page 18, line 15ff of the specification. Table 1 at page 19 lists the eight compositions. Experiment numbers 1.1 and 1.2 use a metal deactivator according to the presently-claimed invention; Experiment numbers 1.3 through 1.7 use a different metal deactivator; and Experiment number 1.8 uses no metal deactivator. Example 2 describes the production of test plates and aging tests using the above-discussed Experiment numbers. Figure 1 of the specification shows a curve for the elongation at break for samples according to these Experiment numbers, as described in the specification at page 19, lines 43-45. As described at page 20, lines 1-2, the metal deactivators of Experiment numbers 1.1 and 1.2 have a particularly good effect.

The above-discussed results could not have been predicted by the applied prior art.

Narayan et al discloses a TPU including a stabilizer package comprising 2,6-di(t-butyl)-p-cresol (BHT) and a compound selected from a Markush group of compounds (column 2, lines 27-40), none of which includes the presently-recited metal deactivator.

Nishiguchi et al discloses a covering layer for a cable, made of a crosslinked product of a resin composition containing, as resin components, (a) 10-60% by weight of a polyamide-series elastomer, (b) 5-60% by weight of a TPU, (c) 10-60% by weight of a thermoplastic polyester elastomer, and (d) 0-20% by weight of a thermoplastic styrene-series elastomer (column 2, lines 44-54), which resin composition may optionally contain various additives such as an antioxidant, a metal deactivator, and a flame retarder (column 7, lines 18-24) wherein the metal deactivator may be, for example, 3-(N-salicyloyl)amino-1,2,4-triazole (column 7, line 42).

The Examiner relies on Barbour et al for a disclosure of a percentage range of 2 to 10 wt.% of a metal deactivator in a composition comprising a TPU. The Examiner holds that it would thus have been obvious to use such an amount of metal deactivator in the TPUs of Narayan et al or Nishiguchi et al.

In reply, since Narayan et al does not disclose or suggest the present metal deactivator, combining it with Barbour et al could not result in the present invention. Regarding the combination of Nishiguchi et al and Barbour et al, the Examiner has apparently ignored the fact that Barbour et al's composition comprises 70 to 85 wt.% of carbonyl iron powder. Thus, the amount of metal deactivator in Barbour et al, based on the amount of TPU therein, is substantially greater than the presently-recited range of 0.01 to 2.5% by weight. Thus, even if Barbour et al were combined with Nishiguchi et al, the result would not be the presently-claimed invention. In addition, it is not even clear why one skilled in the art would combine Narayan et al or Nishiguchi et al with Barbour et al, since Barbour et al is particularly concerned with a problem of premature reaction between the

carbonyl iron powder and the polyurethane. Such a problem would not appear to exist in  
Narayan et al or Nishiguchi et al.

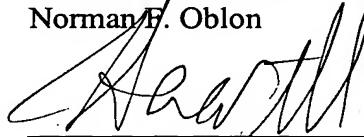
For all the above reasons, it is respectfully requested that the above rejection over be withdrawn.

Regarding the Notice of Draftsperson's Patent Drawing Review (PTO-948),  
Applicants respectfully submit that the Letter Submitting Replacement Drawing Sheets overcomes the drawing objection. It is respectfully requested that the objection be withdrawn.

Applicants gratefully acknowledge the Examiner's allowance of Claims 6-11. Nevertheless, Applicants respectfully submit that all of the presently-pending claims in this application are in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

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